# **BookletChart**<sup>TM</sup>

# NOAR TOUR AND ATMOSPHERIC RUMINISTRATION SO DEPARTMENT OF COMMERCY

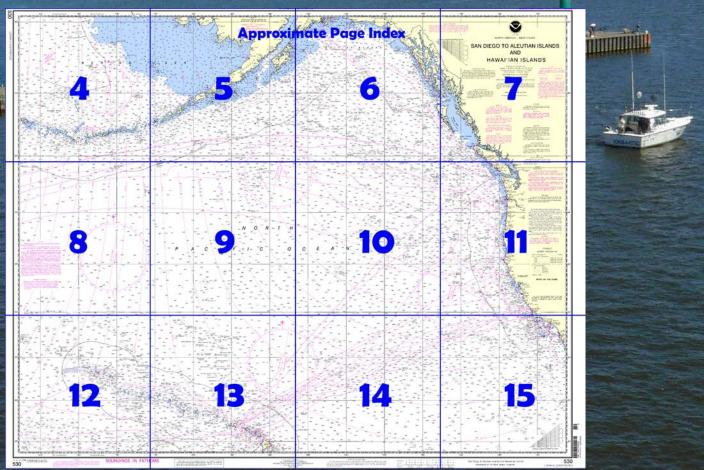
# San Diego to Aleutian Islands and Hawai'ian Islands

**NOAA Chart 530** 

A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



# Published by the **National Oceanic and Atmospheric Administration** National Ocean Service Office of Coast Survey

www.NauticalCharts.NOAA.gov 888-990-NOAA

#### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

#### What is a BookletChart<sup>™</sup>?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience. but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

## **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/coastpilot w.php?book=9



### (Selected Excerpts from Coast Pilot)

Tsunamis (seismic sea waves) are caused by sea bottom earthquakes. Many such seismic disturbances do not produce sea waves and others produce small sea waves, but the occasional large waves can be very damaging to shore installations and dangerous to ships in harbors.

These waves travel great distances and can cause tremendous damage on coasts far from

their source. The wave of April 1, 1946, which originated in the Aleutian Trench, demolished nearby Scotch Cap Lighthouse and caused damages of 25 million dollars in the Hawaiian Islands 2,000 miles away. The wave of May 22-23, 1960, which originated off Southern Chile, caused widespread death and destruction in islands and countries throughout the Pacific. A more recent tsunami, the result of a December 26, 2004

earthquake off the island of Sumatra, Indonesia, caused widespread damage throughout the Indian Ocean. Damage was heavy as far away as the east coast of Africa. It caused over 200,000 deaths (as far away as South Africa) and 13 billion dollars worth of damage.

Earthquakes.-The March 27, 1964, earthquake had wide effect on Prince William Sound, Cook Inlet, and Kodiak Island. Post-earthquake tidal observations indicate bottom changes ranging from a sinkage of 6 feet to a rise of 32 feet. Caution is advised in the affected areas because many of the depths and rocks yet to be resurveyed may be considerably different than represented on the nautical charts or in the Coast Pilot. Williwaws.-These dangerous winds occur mainly along the Aleutian chain and Gulf of Alaska shores, and are influenced by local topography. They are most frequent in winter and are usually the result of air damming up on the windward slopes of mountains. This air spills over in strong gusts on the lee side; that lasts as long as the dammed-up cold air lasts, which frequently is only a matter of minutes. However, such winds are violent, often reaching hurricane force, and their onset is sudden, often interrupting periods of near-calm conditions. Some locations sheltered from the normal winds of the area may be extremely vulnerable to williwaws.

Captains Bay is the arm at the head of Unalaska Bay. Its entrance from Unalaska Bay direct is W of Amaknak Island. The bay is also entered, as previously indicated, by passing E of Amaknak Island through Iliuliuk Harbor, and through the channel leading S from the harbor. The entrance to Captains Bay W of Amaknak Island is marked by **Arch** Rock Light 3A, (53°52′36″N., 166°34′01″W.),15 feet (4.6 m) high, adjacent to the point 0.8 mile from the S extremity of the island. Directly opposite Arch Rock is a bold point marking the W side of the entrance. A reef extends 220 yards channelward from the bold point, and from the reef a bar of 5 to 8 fathoms extends to a point nearly three-quarters of the distance across the entrance toward Arch Rock. Large vessels in entering should pass about 100 to 200 yards off Arch Rock as the deep water channel will be found at those distances.

Numerous wharves, piers, and docks are on the E side of Captain's Bay. Many of the seafood industry facilities are not listed. For a complete description of the port facilities refer to Port Series No. 39, published and sold by the U.S. Army Corps of Engineers.

Anchorage may be had in 17 to 20 fathoms, even bottom of mud and sand, about 0.4 mile E of the northernmost island of the group at the head of Captains Bay. In approaching this anchorage favor the E shore to avoid Swallow Reef and the shoal to the S, which is NE and E of the northernmost island. A lighted buoy is on the E side of Swallow Reef. A reef extends 150 yards from the E shore about abreast of Swallow Reef. Small craft may obtain secure shelter in 9 fathoms, sand and mud bottom, at Port Levashef, E of the most S of the larger islands.

> **U.S. Coast Guard Rescue Coordination Center** 24 hour Regional Contact for Emergencies

RCC Juneau

Commander 17<sup>th</sup> CG District Juneau, Alaska

(907) 463-2000

# Corrected through NM Oct. 16/10 Corrected through LNM Oct. 05/10

#### HEIGHTS

Heights in feet above Mean High Water.

#### AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to avigation.

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U. S Coast Guard Light List.

#### SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine ables and submarine pipeline and cable areas

Pipeline Area

Cable Area

Additional uncharted submarine pipelines and ubmarine cables may exist within the area on his chart. Not all submarine pipelines and subarine cables are required to be buried, and decome exposed. Manners should use extreme aution when operating vessels in depths of vater comparable to their draft in areas where ipelines and cables may exist, and wher inchoring, dragging, or trawling. Covered wells may be marked by lighted or lighted by the second of the control of the control

#### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

#### CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National

Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

#### WARNING

The prudent mariner will not rely solely or my single aid to navigation, particularly or loating aids. See U.S. Coast Guard Light Lis and U.S. Coast Pilot for details.

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

#### POLLUTION REPORTS

Report all spills of oil and hazardous sub-stances to the National Response Center via 1-800-424-8802 (foll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Entry upon Kure Atoll must be approved by the ate of Hawaii Department of Land and Natura secures and Commander, 14th U.S. Coassuard District, Honolulu, Hawaii. The restrictions pply to all civilian and military agencies as well settletches.

#### NOTE C

Sunken ship is loaded with explosives. Vessels are warned to stay well clear of the area.

#### LOCAL MAGNETIC DISTURBANCE

Differences as much as 7° from the normal variation have been reported in the vicinity of latitude 49°55'N longitude 129°50'W.

Danger, Prohibited, and Restricted Areas falling thin the limits of the larger scale charts are own thereon and not repeated on this chart.

Submerged Submarine Operating Areas falling within the areas of the larger scale charts are shown thereon and not repeated on this about.

# **Table of Selected Chart Notes**

# CHEMICAL MUNITIONS DUMPING AREA - RESTRICTION

Site was formerly used or designated for U.S. Chemical munitions dumping. Such use has been

#### For Symbols and Abbreviations see Chart No. 1

The Areas to be Avoided and the Particularly Sensitive Se Area have been charted in their true positions. The limits he Papahānaumokuākea Marine National Monument haveen slightly offset for clarity. The inner limit of the Shi eporting System Area is co-linear with the outer limits of the Areas have have desirated and in the sense of the Areas have the sense of th reas to be Avoided and is not depicted

NOTE D AREA TO BE AVOIDED

All vessels solely in transit should avoid the area (MSC IMO SN.1/Circ.263).

#### HORIZONTAL DATUM

The horizontal reference datum of this chart is North merican Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart

#### PARTICULARLY SENSITIVE SEA AREA

The Particularly Sensitive Soa Area (PSSA) is indicated by a dashed green limiting line highlighted with a green screened band or by a green screened band used in conjunction with the line symbol for other limits with which the PSSA coincides. A PSSA is an environmentally sensitive area around which martiners should exercise extreme caution. See U.S. Coast Pilot volumes for information regarding this area.

#### MAGNETIC VARIATION

Magnetic variation curves are for 2010 derived from 2010 World Magnetic Model and accompanying secular change. If annual change is in same direction as variation it is additive and the variation is increasing. If annual change is opposite in direction to variation it is subtractive

Mercator Projection Scale 1:4,860,700 at Lat 50°00'N North American Datum of 1983 (World Geodetic System 1984)

#### SOUNDINGS IN FATHOMS

(For offshore navigation only)

# NOTE G SHIP REPORTING SYSTEM

SHIP REPORTING SYSTEM
The following vessels entering or departing any U.S. port of
place and in transit through the reporting area are required to
report into the System: all vessels 300 gross tons or greater
and all vessels in the event of a developing emergency. The
following vessels in transit through the reporting area should
report into the System: all vessels 300 gross tons or greater,
fishing vessels, and all vessels in the event of a developing
emergency. See IMO SNI, 10r. 273. Information concerning
the Ship Reporting System is also published in the U.S. Coast
Pilot 7, Chapters 2 and 14, and updated through Notices to
Mariners. Information may also be obtained at the Office of
the Commander, 14th Coast Guard District in Honolulu, or he Commander, 14th Coast Guard District in Honolulu, or at the Office of the District Engineer, Corps of Engineers, in

## TRAFFIC SEPARATION SCHEMES

Recommended traffic lanes established for the approaches to Prince William Sound are shown on chart 16700. Recommended traffic lanes established for the approaches to San Francisco Bay are shown on charts 18645, 18680, and

Recommended traffic lanes established for the approaches to Strait of Juan de Fuca are shown on charts 18480, 18400

Recommended traffic lanes established in Santa Barbara and San Pedro Channels are shown on charts 18022, 18720 18740, 18746, and 18747.

#### HAWAIIAN ISLANDS NATIONAL WILDLIFE REFUGE

HAWAIIAN ISLANDS NATIONAL WILDLIFE REFUGE
The Hawaii'an Islands from longitude 161° W to
176° W are part of the Hawaiian Islands National Wildlife
Refuge, and under the jurisdiction of the U.S. Fish and
Wildlife Service, Department of the Interior.
The Islands and atolls in the refuge include Nihoa,
Necker Island, French Frigate Shoals, Gardner
Pinnacles, Maro Reef, Laysan Island, Lislanski
Island, Pearl and Hermes Atoll. National Wildlife Refuge
System regulations pertaining to these islands and
atolls are contained in CFR 50, parts 25-32.
Entry to the refuge is strictly prohibited without
prior approval from the Refuge Manager, Pacific Remote
Islands National Wildlife Refuge Complex, U.S. Fish and
Wildlife Service, 300 Ala Moana Bivd., Honolulu, Hawaii
96850.

The restrictions apply to all civilian and military agencies as well as individuals

#### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard, British Admiralty, National Geospatial-Intelligence Agency and Canadian

#### VESSEL TRANSITING

The U.S. Coast Guard and the Pacific States/British Columbia Oil Spil Task Force endorse a system of voluntary measures and minimur distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Inlict, Alaska and San Diego California. See U.S.Coast Pilot 7, 8 or 9, Chapter 3 for details.

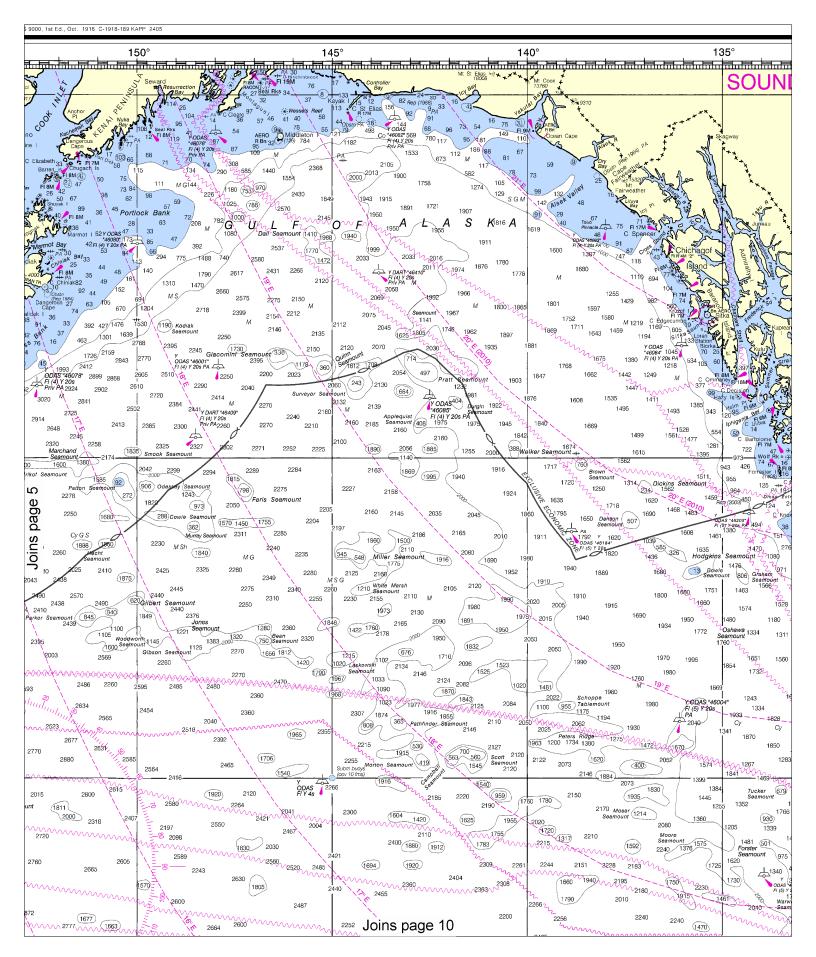
Maritime boundary provisionally applied pending formal exchange of

According to Article 3 of the Agreement Between the United States of America and Russia on the Maritime Boundary, signed June 1, 1990:

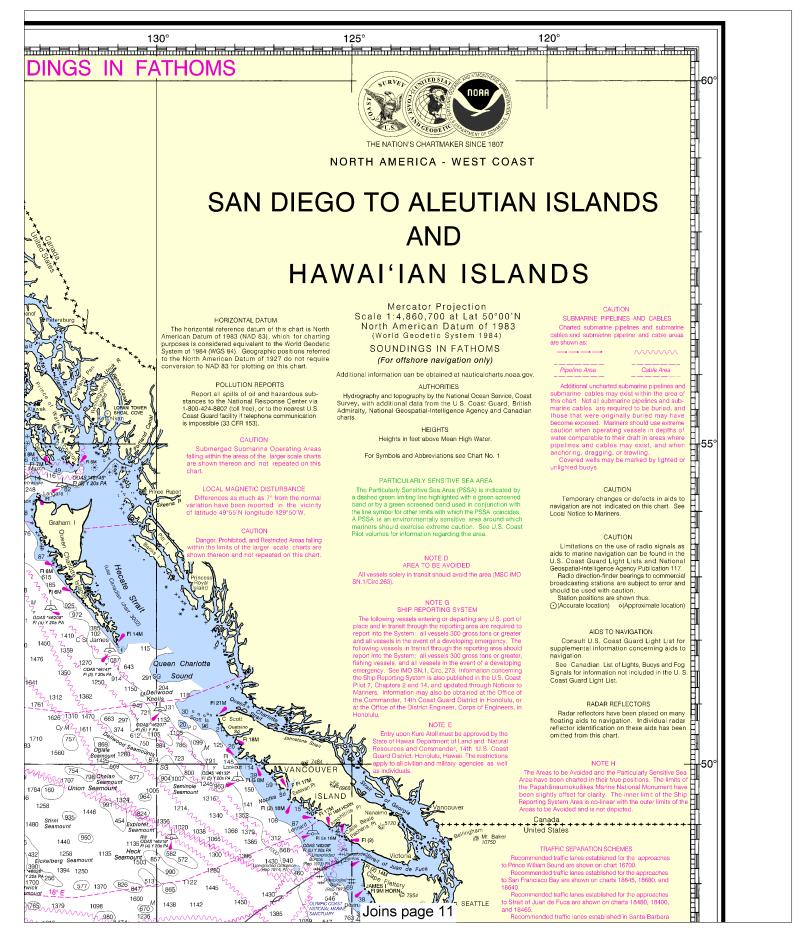
- "1. In any area east of the maritime boundary that lies within 200 natical miles of the baseline from which the breadth of the territorial sea of Russia is measured but beyord 200 nautical miles of the baselines from which the breadth of the territorial sea of the United States is measured ("eastern special area"), Russia agrees that henceforth the United States may exercise the sovereign rights and jurisdiction derived from exclusive economic zone jurisdiction that Russia would otherwise be en-
- exclusive economic zone jurisdiction that Hussia would otherwise be entitled to exercise under international law in the absence of the agreement of the Parties on the maritime boundary..

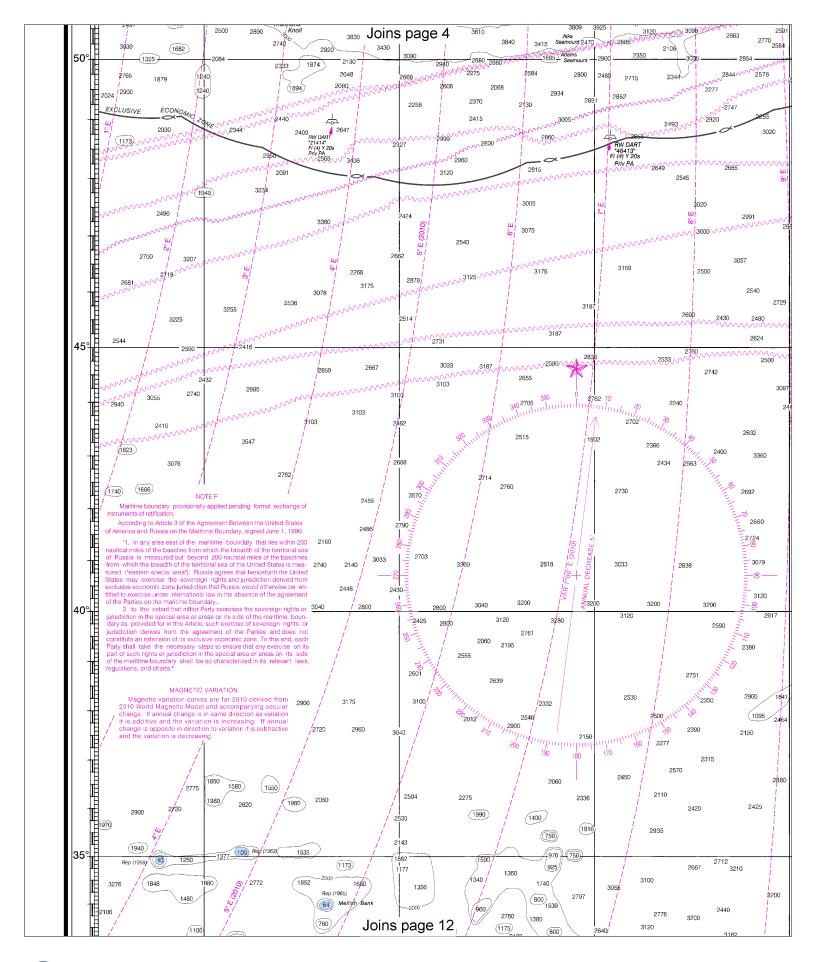
  3. to the extent that either Party exercises the sovereign rights or jurisdiction in the special area or areas on its side of the maritime boundary as provided for in this Article, such exercise of sovereign rights or jurisdiction derives from the agreement of the Parties and does not constitute an extension of its exclusive economic zone. To this end, each Party shall take the necessary steps to ensure that any exercise on its part of such rights or jurisdiction in the special area or areas on its side of the maritime boundary shall be so characterized in its relevant laws, regulations, and charts.



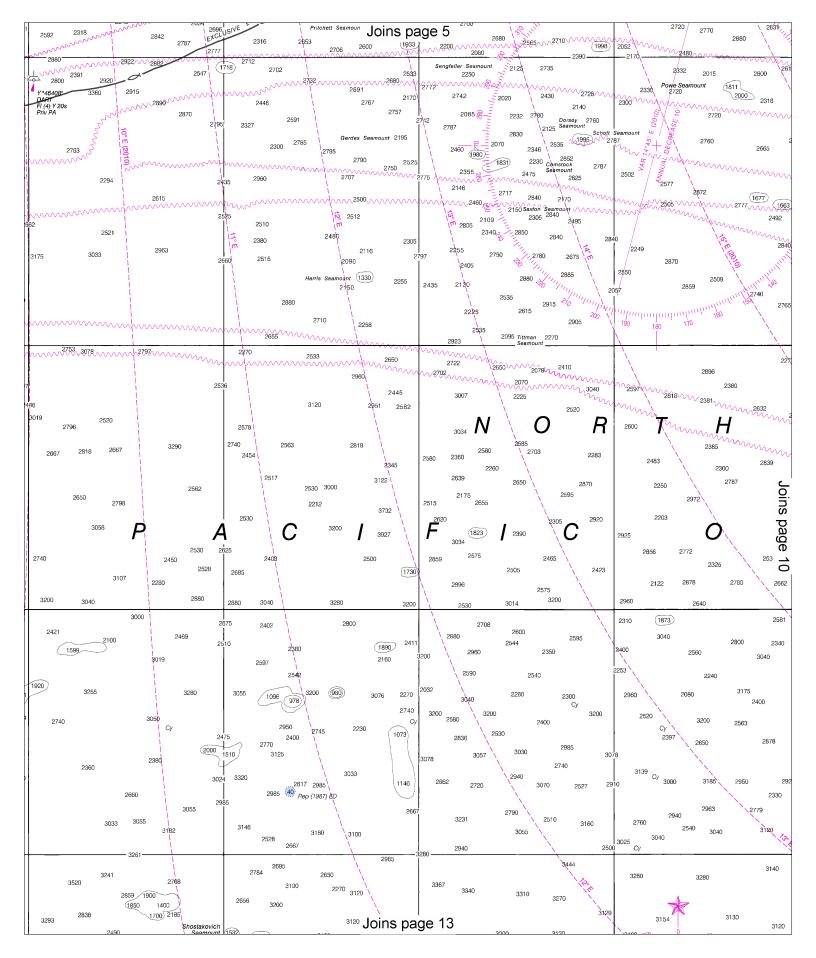




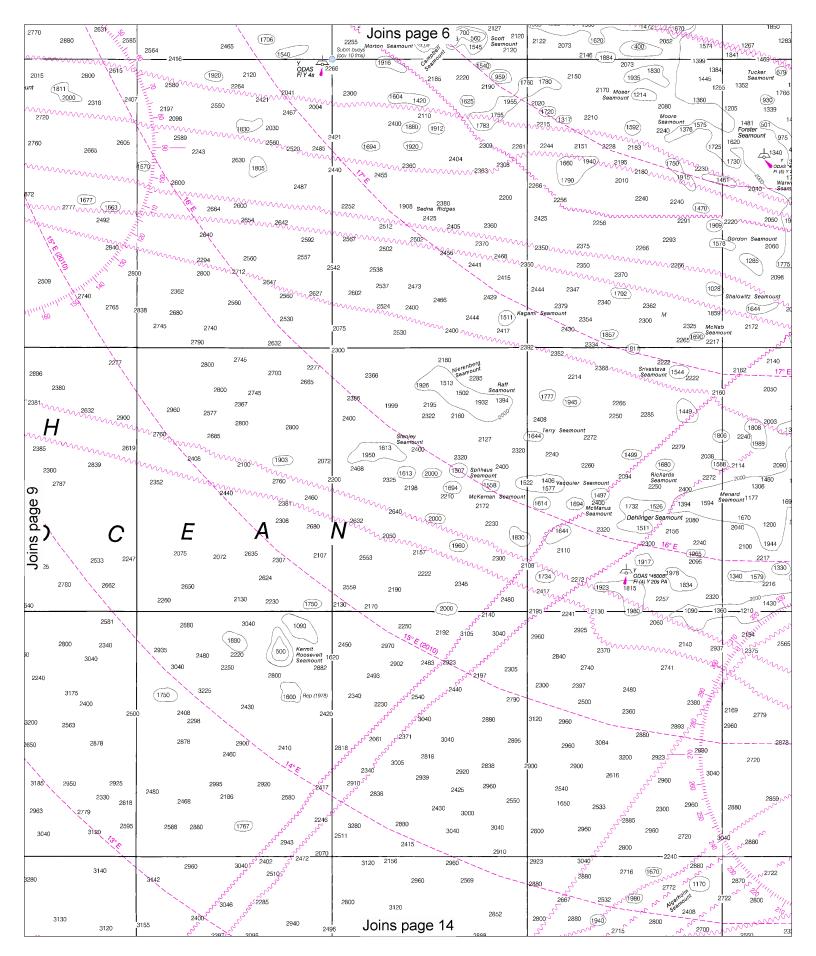




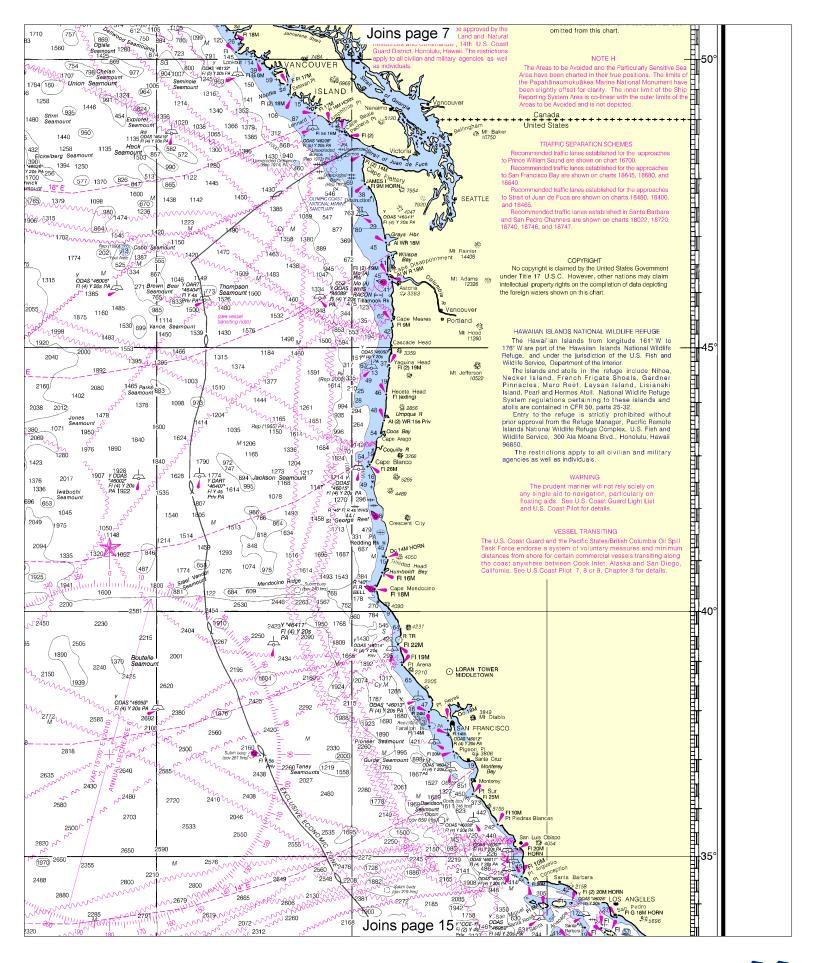


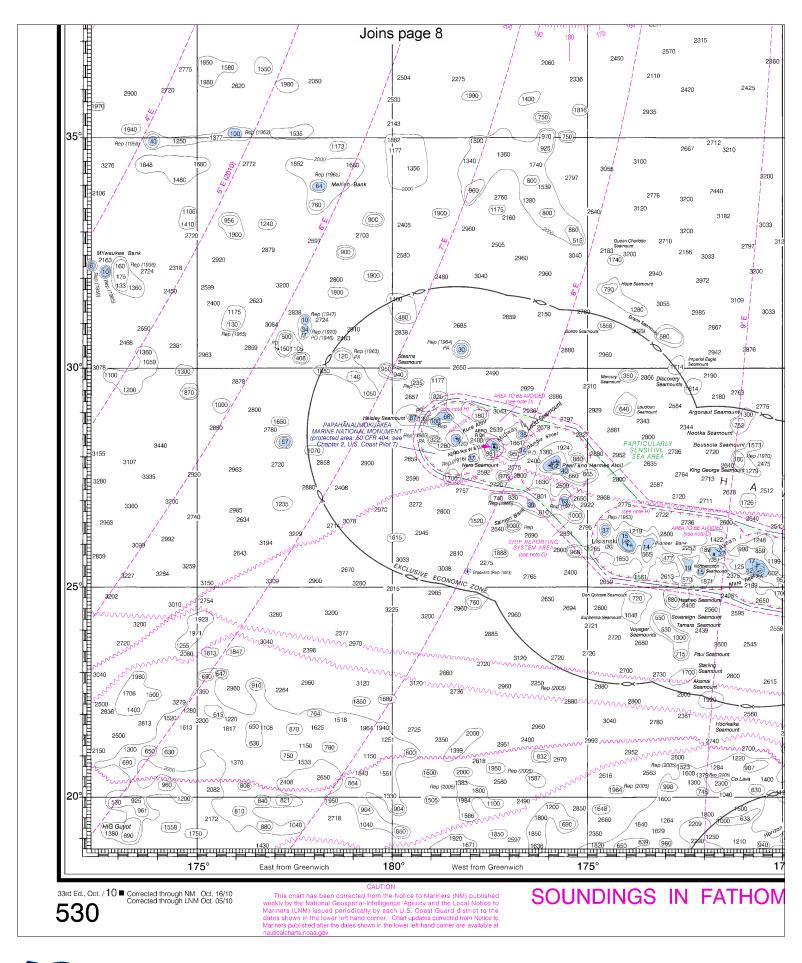




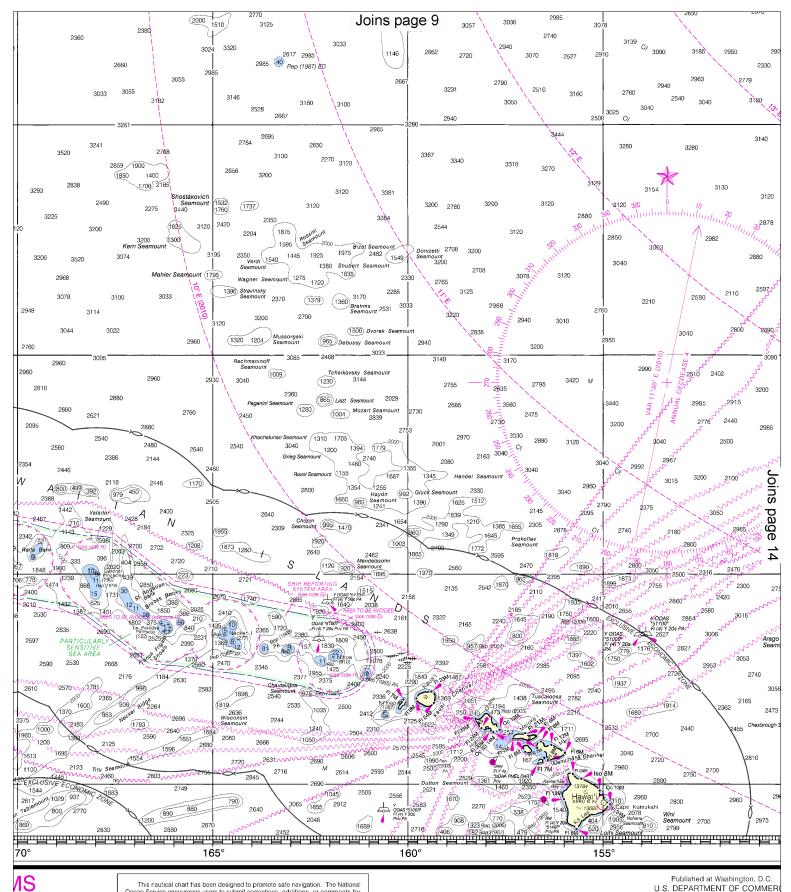


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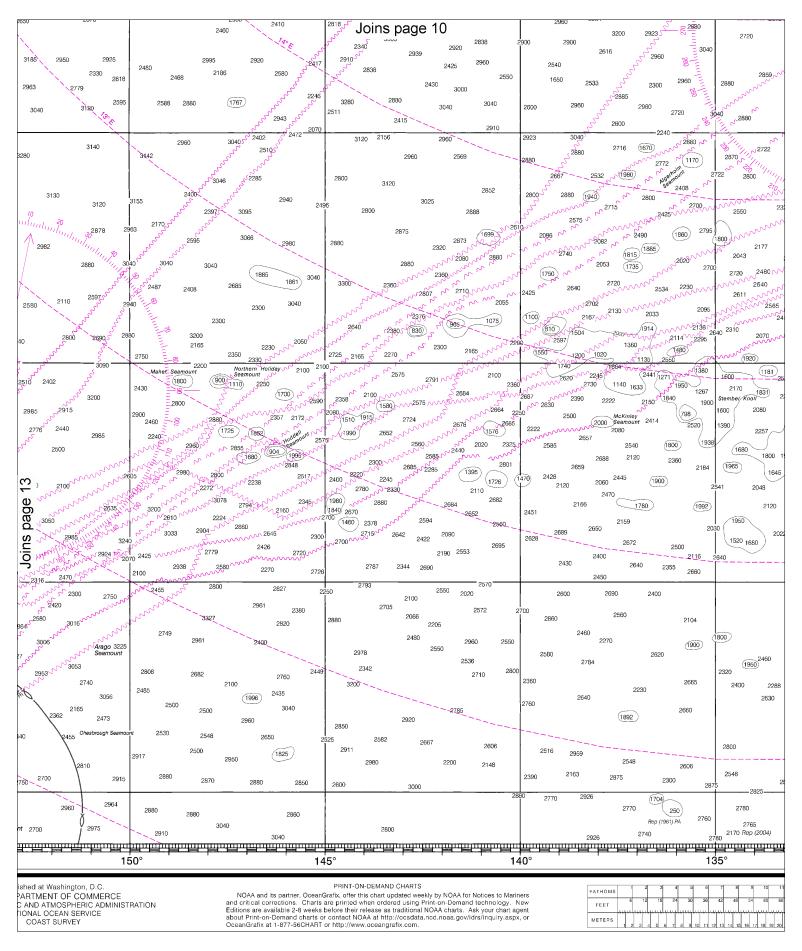


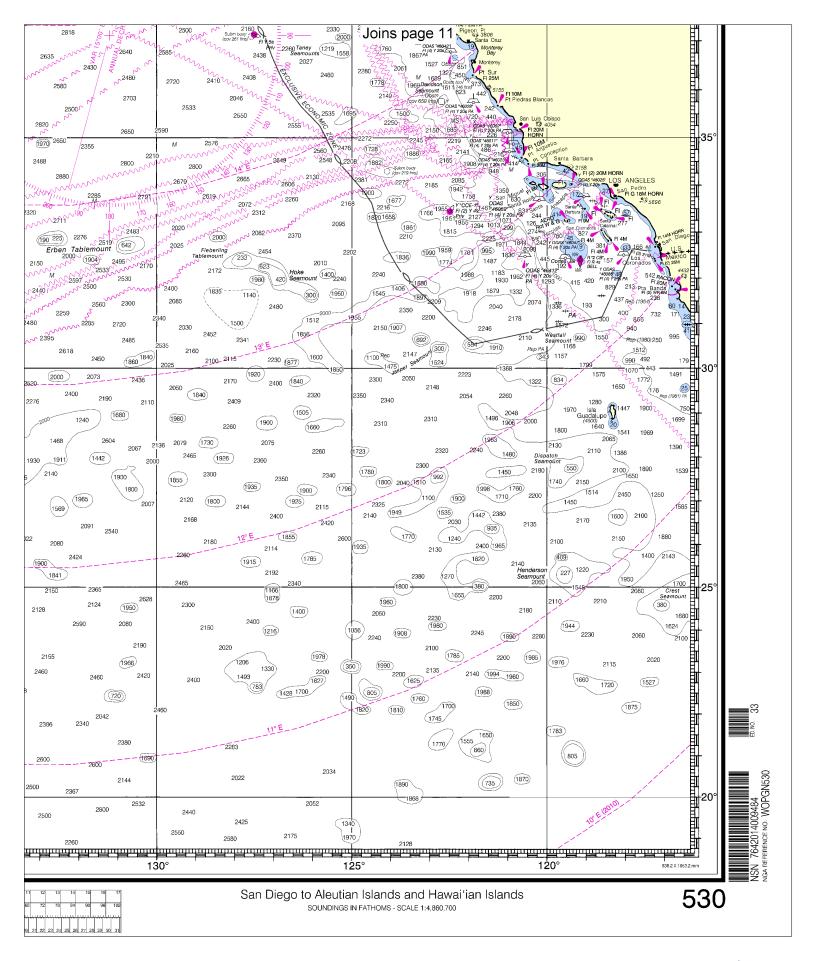




This nautical chart has been designed to promote safe navigation. The National Oser Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

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COAST SURVEY







# VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

#### **Distress Call Procedures**

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

# **Quick References**

Nautical chart related products and information — http://www.nauticalcharts.noaa.gov

Online chart viewer — <a href="http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html">http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html</a>

Report a chart discrepancy — http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx

Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM\_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

